Application No.: Not Yet Assigned Docket No.: 4005-0261PUS1

## AMENDMENTS TO THE CLAIMS

- 1. (Currently amended) An electromagnetic valve actuator comprising an actuator member (11, 14) movable under the effect of a resilient member (12, 13) and of at least one coil (20), and at least one permanent magnet (22) arranged to hold the actuator member (11, 14) in at least one of its extreme positions against the resilient member (12, 13) when the coil (20) is not powered, the coil (20) being associated with a core (16) comprising two portions (17) having respective first facets (21) in contact with the permanent magnet (22) and respective second facets (23) that present between them an airgap (e) (e) of size that is much smaller than a thickness (H) of the permanent magnet, the actuator being characterized in that wherein the airgap (e) (e) forms an angle with the direction (25) of magnetization of the permanent magnet (22).
- 2. (Currently amended) An electromagnetic actuator according to claim 1, characterized in that wherein the airgap (e) (e) forms a right angle with the direction (25) of magnetization of the permanent magnet (22).